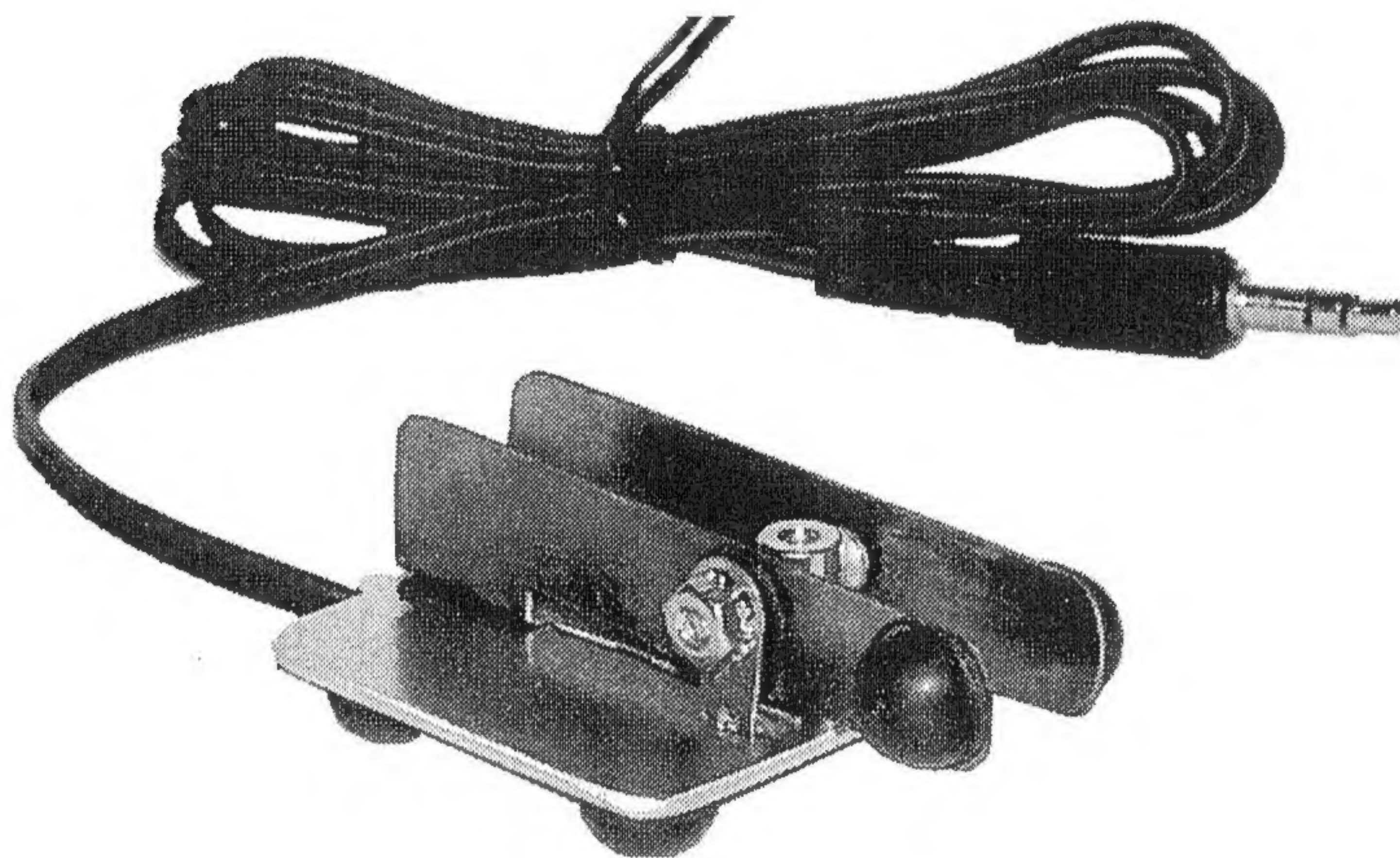


# MFJ

## *Travel Iambic Paddle Kit*

*Model MFJ-561K*



### INSTRUCTION MANUAL

**CAUTION: Read All Instructions Before Operating Equipment !**

# MFJ ENTERPRISES, INC.

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## **INTRODUCTION**

Your new Travel Iambic Paddle is a great addition to any CW collection. Its small, lightweight frame makes it ideal for traveling. Just plug your pocket-sized paddle into your favorite keyer or rig and you are ready to send smooth CW from almost anywhere.

This kit is a very simple one that can be constructed by the most novice of kit builders. By following the instructions carefully, you should be able to assemble the paddle and send CW in no time. Though the paddle is universal to most transceivers, MFJ recommends that the paddle be used with compatible MFJ products. With whatever keyer or rig you use, verify that it has a 3.5 mm jack input.

## **BEFORE YOU START BUILDING**

**Construction Area:** Kit construction requires a clean, smooth, and well-lighted area where you can easily organize and handle small parts without losing them. An inexpensive sheet of white poster board makes an excellent construction surface, while providing protection for the underlying table or desk. Good overhead lighting is a plus, and a supplemental high-intensity desk lamp will prove especially helpful for close-up work. Safety is also an important consideration. Be sure to use a suitable high-temperature stand for your soldering iron, and keep the work area free of combustible clutter.

**Tools Needed:** While assembling this kit you will need a work area outfitted with the following tools and supplies:

- ☐ Phillips Head Screwdriver
- ☐ 30 to 60 Watt Soldering Iron
- ☐ High-temperature Iron Holder with Moist Cleaning Sponge
- ☐ Rosin-core Solder (thin wire-size preferred)
- ☐ Needle Nose Pliers or Surgical Hemostats
- ☐ Diagonal Cutters or "Nippy Cutters"

**Solder:** When you are directed to *solder*, this means to solder the part's leads in place, and to inspect all solder connections for flaws or solder bridges. If no soldering problems are noted, nip off the excess protruding leads with a sharp pair of cutters.

**Soldering Tips:** Cleanliness and good heat distribution are the keys to professional soldering. Before you install and solder each part, inspect all leads for oxidation. If oxidation is present or if the metal surface is dull, sand the piece with fine emery paper until shiny. Also, clean the oxidation and excess solder from the soldering tip. Be sure that the soldering iron is fully heated before starting. Allow the tip to contact both the lead and pad for about one second before feeding the solder to the connection. The solder flows best if the



surfaces to be connected are hot. Then, feed the solder around the lead causing the solder to wick up, wetting all exposed surfaces.

**Desoldering Tips:** If you make a mistake in soldering and need to correct a step, follow these instructions carefully. First, grasp the part to be removed with a pair of hemostats or needle-nose pliers. Heat the solder joint until the solder loosens and pull gently. The lead should then be able to be extracted. Repeat this process for any other bad connections.

## PARTS LIST

Your kit should contain all of the parts listed below. Please identify and inventory each part on the checklist before you start building. If any parts are missing or damaged, refer to the manual’s warranty section for replacement instructions.

<input checked="" type="checkbox"/>	Qty	Part Description	Part Number
<input type="checkbox"/>	1	Paddle Base	738-0561
<input type="checkbox"/>	1	Paddle	735-0561
<input type="checkbox"/>	4	Phillips Head Screws	654-0250S
<input type="checkbox"/>	3	Solder Lugs (Aluminum Tabs)	720D-0621L
<input type="checkbox"/>	2	Washers	714-0631
<input type="checkbox"/>	2	Shoulder Washers	7145-0421N
<input type="checkbox"/>	3	Kep Nuts	705-0440-K
<input type="checkbox"/>	1	Open-end 3.5 mm Stereo Cable	620-8005
<input type="checkbox"/>	1	Spacer	715B-0500S
<input type="checkbox"/>	6	Rubber Feet	770-1162
<input type="checkbox"/>	1	Wire Tie	745-2149

## STEP-BY-STEP ASSEMBLY INSTRUCTIONS

Before assembling your kit, please take time to read and understand the MFJ kit warranty located in this manual. Once construction is started, the kit is non-returnable. And, if you have not already done so, please verify that all parts listed in the inventory are included. If anything is missing or broken, refer to the warranty instructions for replacing missing or damaged parts. Once you have completed and understood these things, you may proceed in building your kit.

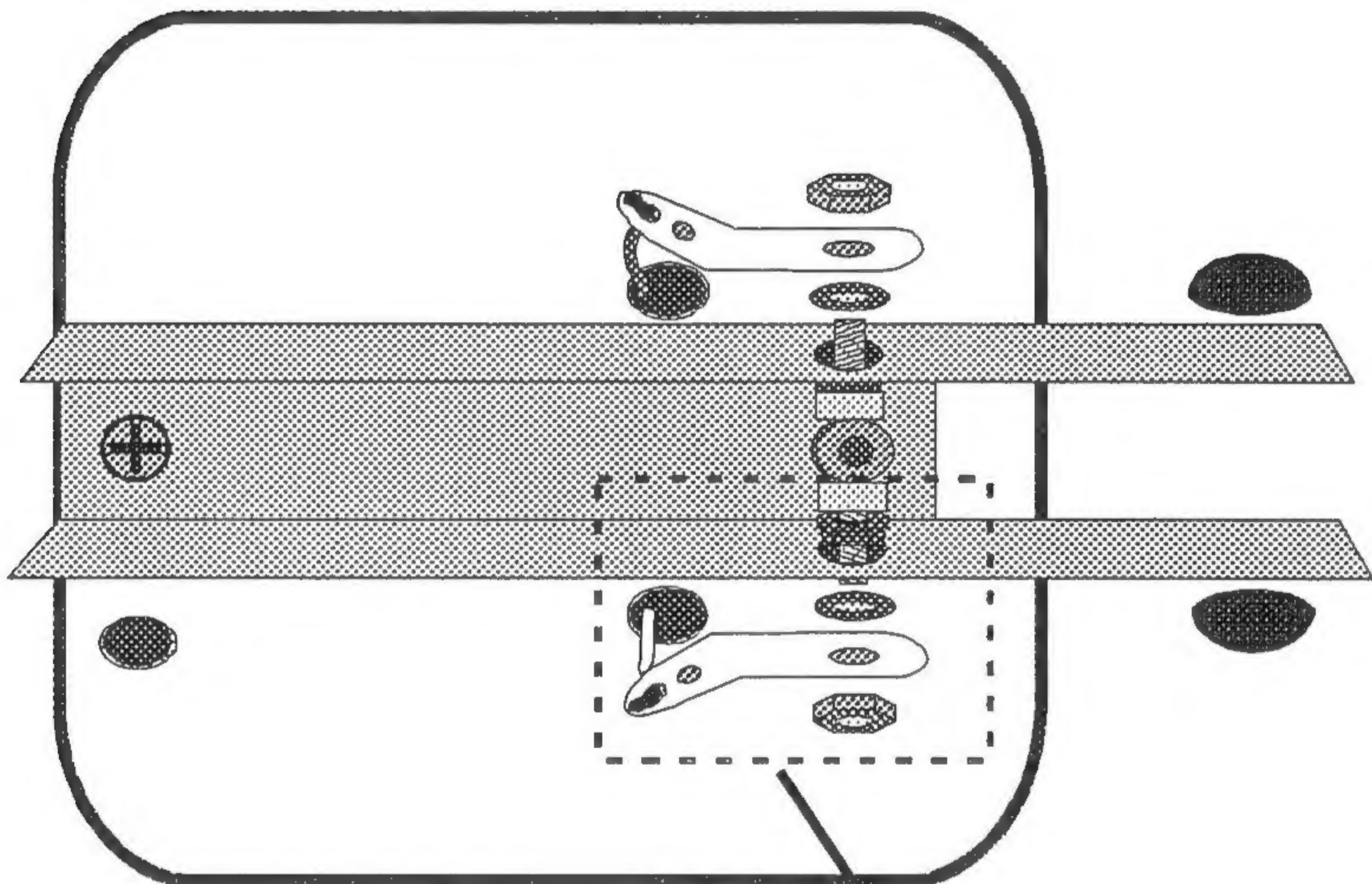
Begin by laying out your kit in a clean well-lit area. If you follow the instructions carefully, you should be able to easily assemble the kit. If problems occur in assembling, either refer to the figures or go back and retrace your previous steps.

For the following steps, reference Figures 1-4 for general identification of parts and placement.

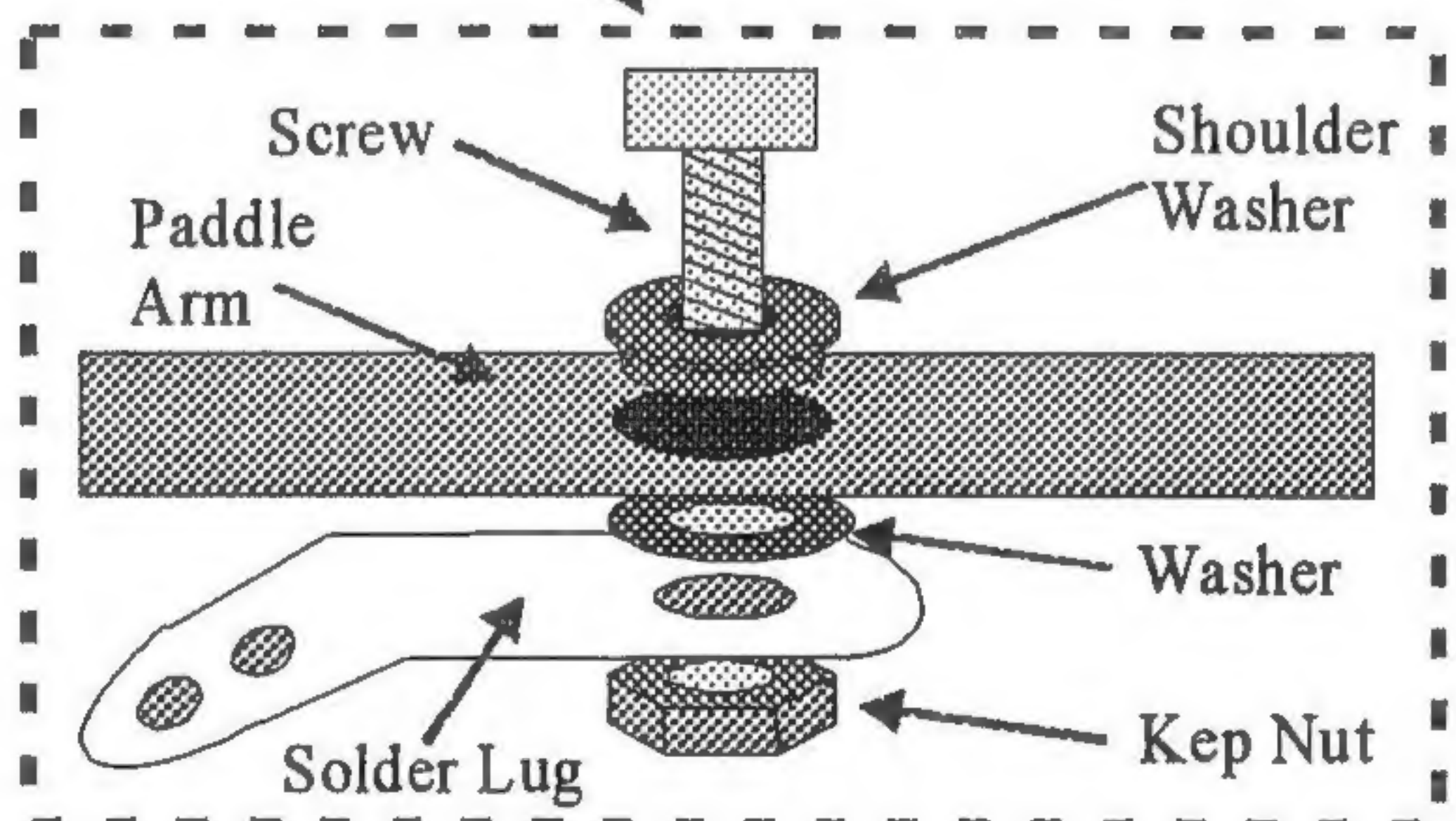


1. Insert the shoulder washer into the hole on the side of the paddle facing out. Make sure that the shoulder is completely inside the hole and the washer is flush with the paddle.
2. Next, insert a screw into the hole from the inside out. On the outside of paddle, place a washer, a solder lug and then a kep nut on the screw. Be sure to tighten it with the solder lug facing away from the arms of the paddle, parallel to where the base goes (see Figure 1).
3. Repeat steps 1 and 2 for the other side. Make sure that the solder lugs are not in contact with the paddle. The washers are provided to insulate the screw, solder lug and kep nut from the paddle.

**Figure 1**



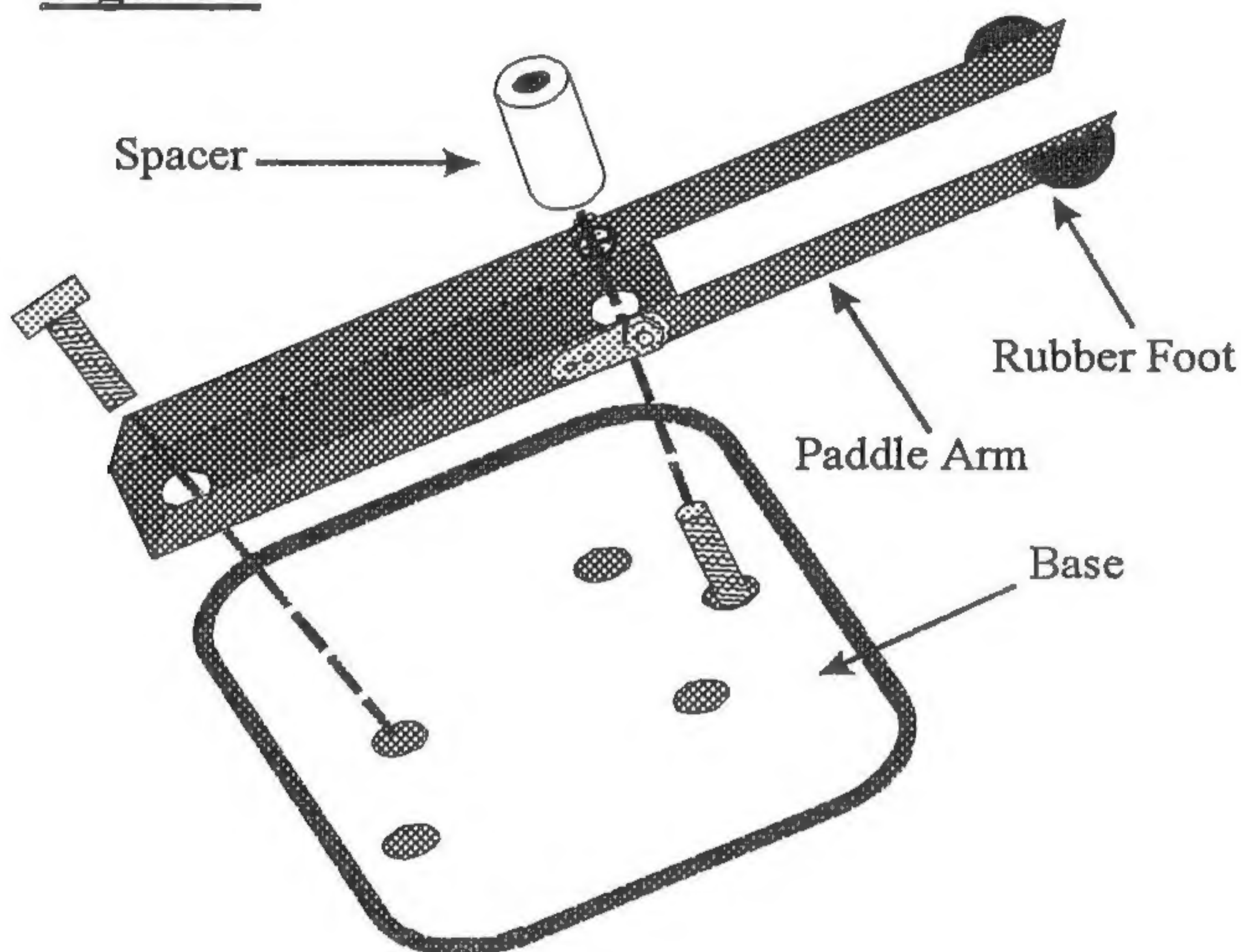
Make sure that the shoulder is completely inside the hole and the washer is flush with the paddle. They are there to prevent conduction to the paddle arms.





4. Place the Paddle on its base and then fasten. First, secure the back of the paddle with a screw and kep nut. Then, place the spacer between the paddle's arms and secure it from the bottom with the screw and the remaining solder lug (see Figure 2 and 4). Be certain that all screws and nuts are tight before proceeding. Make sure there is a small gap between the spacer and the screw heads.

**Figure 2**

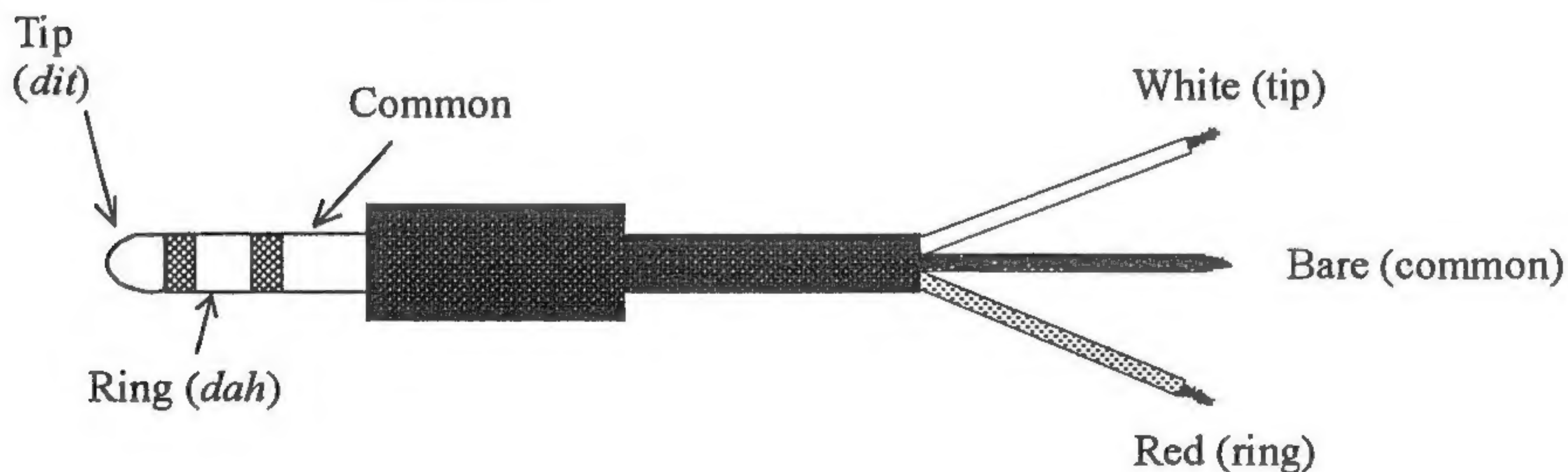


The next steps require soldering. For tips on soldering refer to BEFORE YOU START BUILDING portion of the manual.

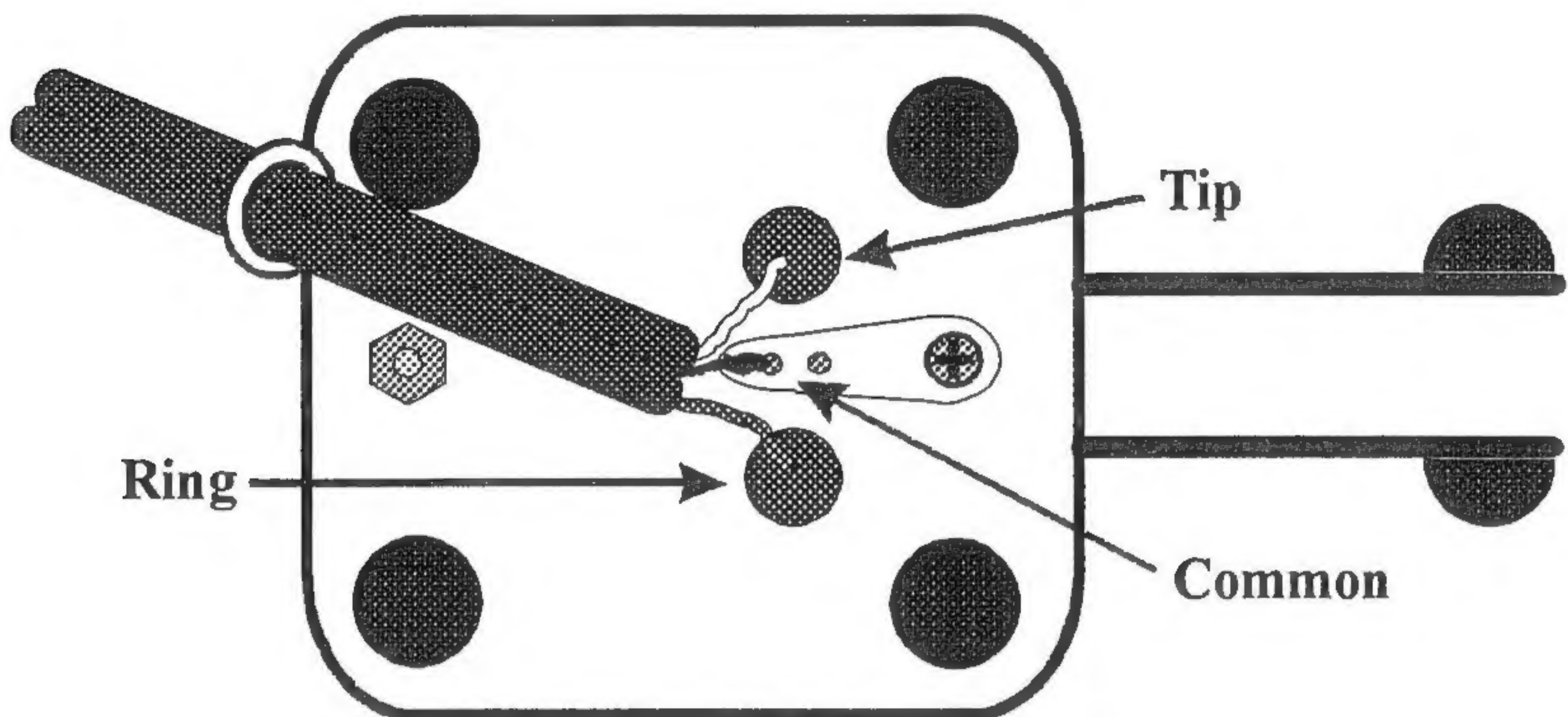
**Caution:** When heated, soldering irons and solder can seriously burn anything they contact.

5. Prepare the wire of the 3.5 mm jack to be connected to the Iambic Paddle. This may require you to separate and strip the wires.
6. Decipher which wire is the tip, which is the ring, and which is the common (see Figure 3).

**Figure 3**





**Figure 4**

7. Flip the paddle over so that the bottom is facing up. Then, lay the wire along the bottom side of the paddle (see Figure 4).
8. Use Figures 3 and 4 to orient the wires to their correct positions. With the paddle positioned like Figure 4, run the wire that corresponds to the tip through the upper hole, the ring through the bottom hole, and the common to the solder lug located on the base.
9. Solder the common wire to the solder lug on the bottom of the base and let cool.
10. Flip the paddle back right side up and pull each wire to the corresponding solder lug on either side of the paddle.
11. Solder the wires one at a time to the corresponding solder lugs on either side of the paddle and let cool. Make sure that the wires do not make a connection with the paddle arms.
12. Place 4 rubber feet on the bottom of the base (one on each corner) and one on either side of the arms of the paddle (see Figure 1 and 4).
13. Wire tie the cable to the base.

Before using your kit be sure to give it a thorough quality control inspection. Check that all screws and nuts are tight and all soldering is secure.

Now that you have completed the construction of your kit, you are now ready to enjoy all that your new Travel Iambic Paddle has to offer. However, if your kit does not work properly, refer to the Troubleshooting section of the manual.

Lastly, if you are not proficient in Morse Code or just a little rusty, you may order a Morse Code manual from the MFJ catalog or from our website <http://www.mfjenterprises.com>.



## **TROUBLESHOOTING**

If your paddle does not function properly, proceed with the following steps.

- ☐ Refer to Figures 1, 2, and 3 to ensure that your paddle is assembled correctly.
- ☐ Make sure that all screws and nuts are secure.
- ☐ Check all solder marks for flaws.
- ☐ Be sure that all the leads of the wires are properly connected (see steps 4-10 and Figures 3 and 4).
- ☐ Make sure the 3.5 mm jack is plugged correctly in your keyer or rig and that the keyer or rig is properly turned on.
- ☐ Be sure that there is a gap between the spacer and the screw heads.
- ☐ Make sure that the shoulder washer is completely inside the hole on the paddle and the washer is flush with the paddle.

If none of these steps help, go back through the assembly instructions to insure that the kit was properly assembled. If the kit does not work after this, contact your local MFJ distributor for product assistance.



## LIMITED 12 MONTH WARRANTY

MFJ Enterprises, Inc. warrants to the original owner of this product, if manufactured by MFJ Enterprises, Inc. and purchased from an authorized dealer or directly from MFJ Enterprises, Inc. to be free from defects in material and workmanship for a period of 12 months from date of purchase provided the following terms of this warranty are satisfied:

1. The purchaser must retain the dated proof-of-purchase (bill of sale, canceled check, credit card or money order receipt, etc.) describing the product to establish the validity of the warranty claim and submit the original or machine reproduction of such proof of purchase to MFJ Enterprises, Inc. at the time of warranty service. MFJ Enterprises, Inc. shall have the discretion to deny warranty without dated proof-of-purchase. Any evidence of alteration, erasure, or forgery shall be cause to void any and all warranty terms immediately.
2. MFJ Enterprises, Inc. agrees to repair or replace at MFJ's option without charge to the original owner any defective product under warrantee provided the product is returned postage prepaid to MFJ Enterprises, Inc. with a personal check, cashiers check, or money order for \$7.00 covering postage and handling.
3. This warranty is NOT void for owners who attempt to repair defective units. Technical consultation is available by calling Service Department at 662-323-0549 or the MFJ Factory at 662-323-5869.
4. This warranty does not apply to kits sold by or manufactured by MFJ Enterprises, Inc.
5. Wired and tested PC board products are covered by this warranty provided only the wired and tested PC board product is returned. Wired and tested PC boards installed in the owner's cabinet or connected to switches, jacks, or cables, etc. sent to MFJ Enterprises, Inc. will be returned at the owner's expense unrepared.
6. Under no circumstances is MFJ Enterprises, Inc. liable for consequential damages to person or property by the use of any MFJ products.
7. Out-of-Warranty Service: MFJ Enterprises, Inc. will repair any out-of-warranty product provided the unit is shipped prepaid. All repaired units will be shipped COD to the owner. Repair charges will be added to the COD fee unless other arrangements are made.
8. This warranty is given in lieu of any other warranty expressed or implied.
9. MFJ Enterprises, Inc. reserves the right to make changes or improvements in design or manufacture without incurring any obligation to install such changes upon any of the products previously manufactured.
10. All MFJ products to be serviced in-warranty or out-of-warranty should be addressed to:

**MFJ Enterprises, Inc.  
300 Industrial Park Road  
Starkville, Mississippi 39759 USA**

and must be accompanied by a letter describing the problem in detail along with a copy of your dated proof-of-purchase.

11. This warranty gives you specific rights, and you may also have other rights which vary from state to state.